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SUSPENDED SEDIMENT DATA FROM  
NEARSHORE WATERS OF GEORGIA

by  
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OCEAN ATLAS SERIES

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## INTRODUCTION

The nearshore water of the Georgia Bight is very turbid relative to other areas of the east coast (Manheim, Meade and Bond, 1970, Oertel, 1976). The turbidity of the waters is documented through a variety of different oceanographic projects, some of which were oriented toward biologic, physical, chemical or geologic investigations. Because of this variety some of the data are not always comparable. Characterization of clays from the coastal plain is discussed by Bigham, 1972, Heron, Johnson, Wilson and Michael, 1964, Meade 1969, Manheim, Meade and Bond, 1970, Neiheisel and Weaver, 1967, and Oertel, 1976. This technical report is a summary of recent suspended sediment data collected from nearshore waters of Georgia. No attempt is made to interpret the mechanics of suspended sediment transport or the processes controlling its distribution.

Data that was collected from various sources are presented in atlas form. The study area extended from Cape Romain, South Carolina to Jacksonville, Florida. Data recovery within this area was restricted to projects that were predominantly located within the nearshore zone (0-40 km offshore). Several samples that were not included were part of estuarine sampling programs or shelf and gulf water sampling programs. A more complete description of these data may be found in the literature of the bibliography.

## FIGURE 1

Satellite photography of the Georgia Bight illustrates the large loads of suspended sediment in nearshore water between Jacksonville, Florida and Cape Romain, South Carolina. Plumes from numerous coastal inlets appear to merge in the nearshore zone and form a turbid band.

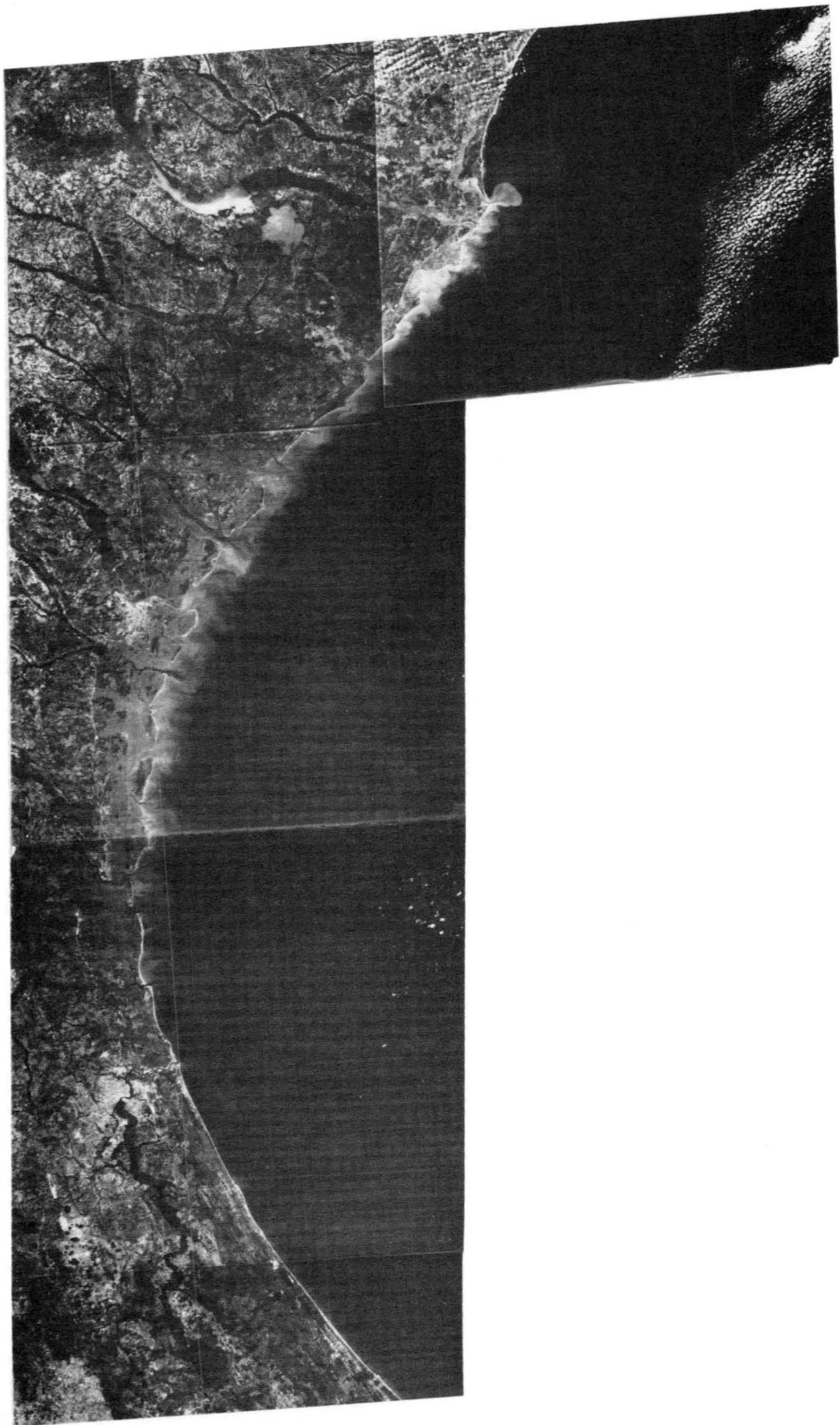
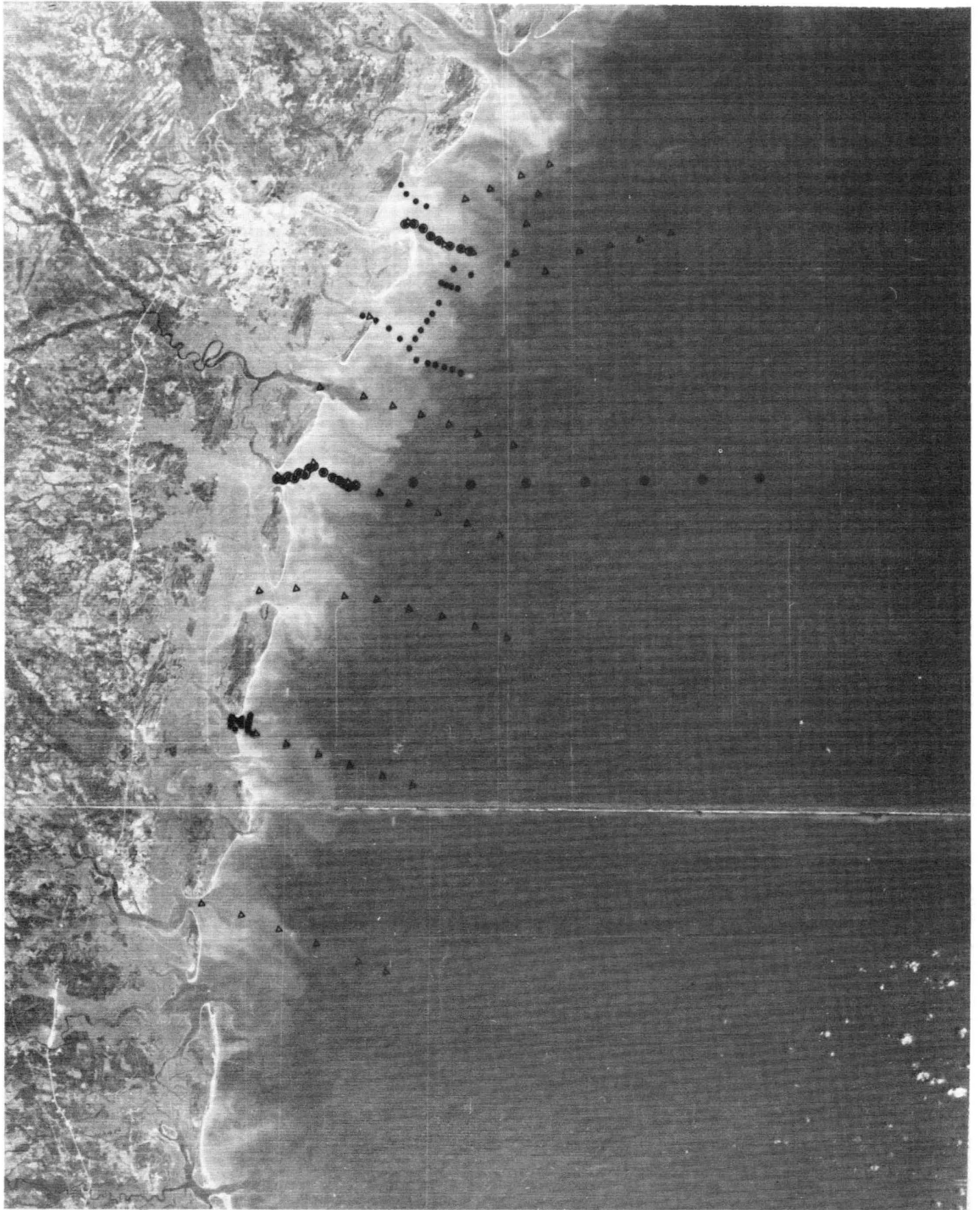


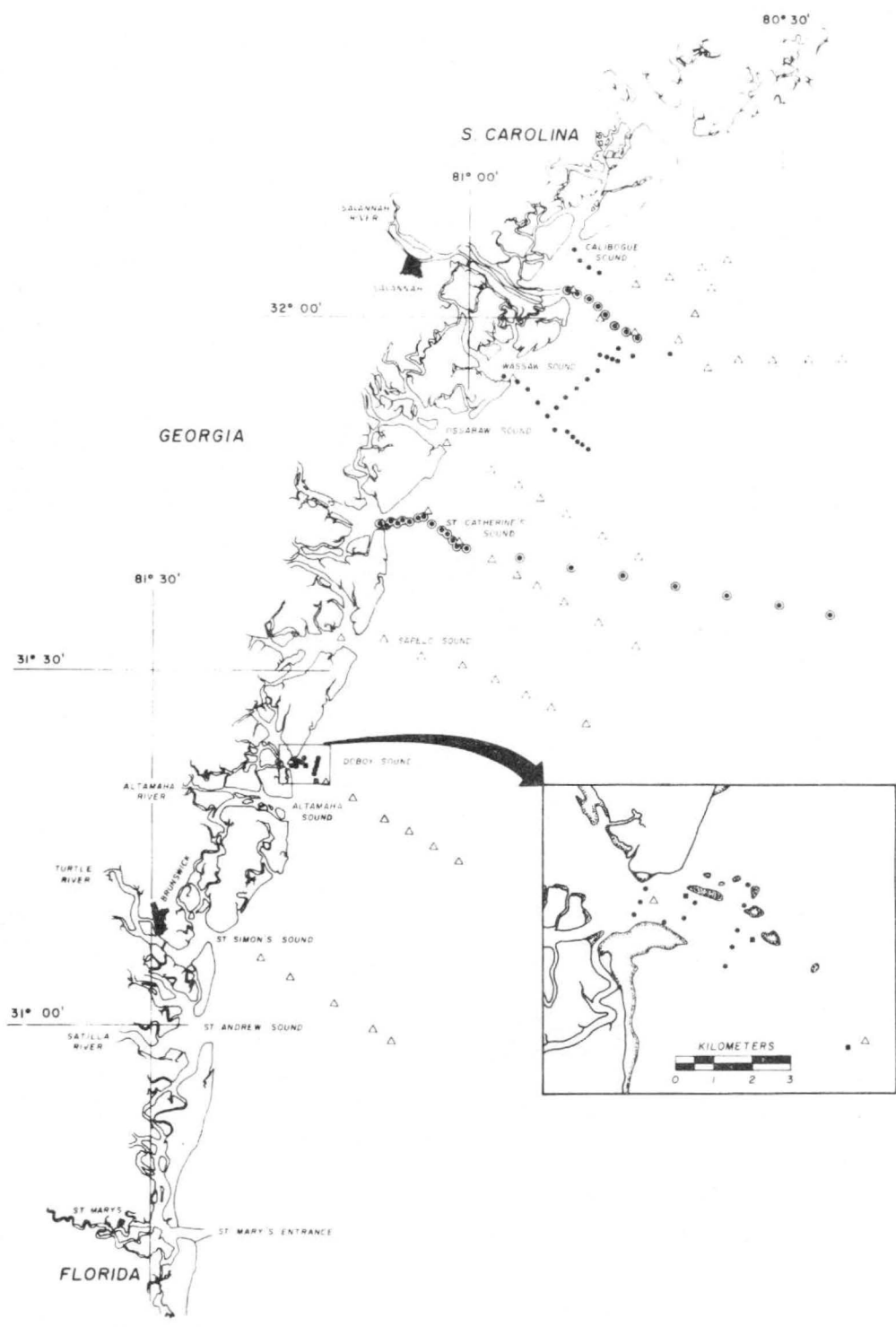
FIGURE 2

Satellite photography of the Georgia coast illustrates the distribution of various field sampling programs with respect to the apparent position of the turbid zone.

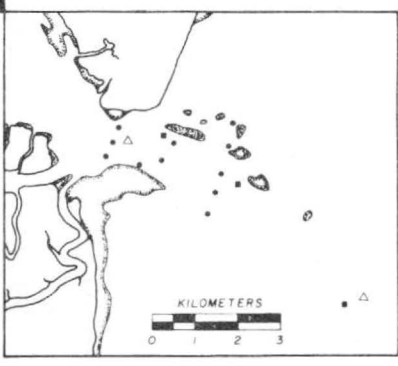


## FIGURE 3

Map of station locations for six different sampling programs with principal investigators and sampling periods indicated.

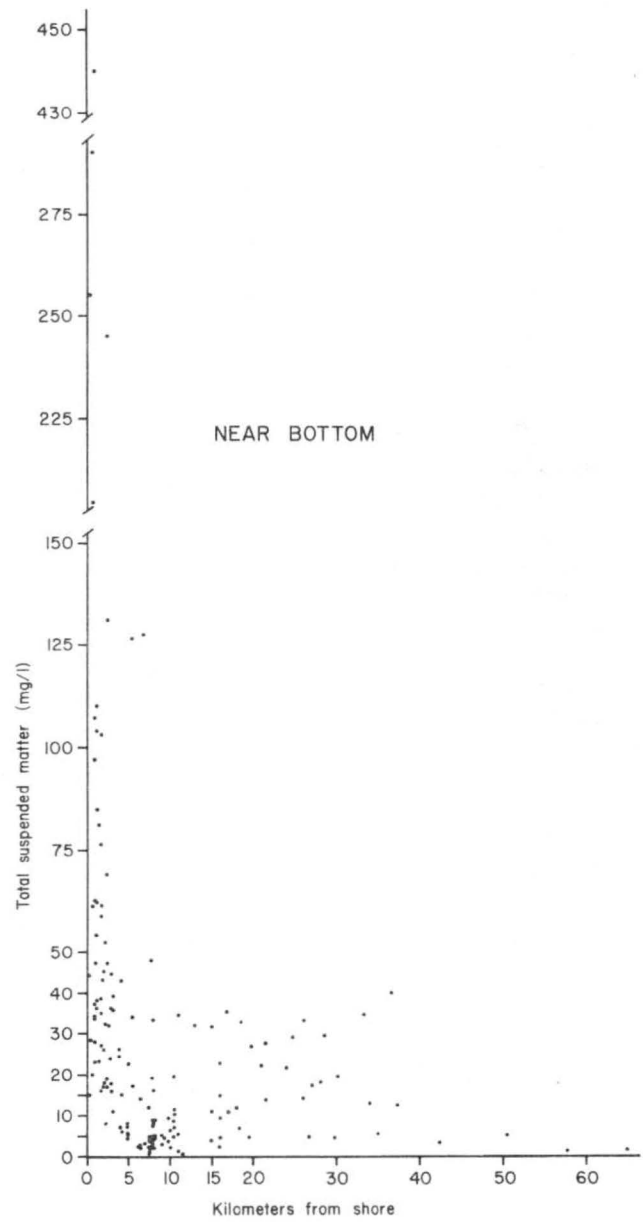
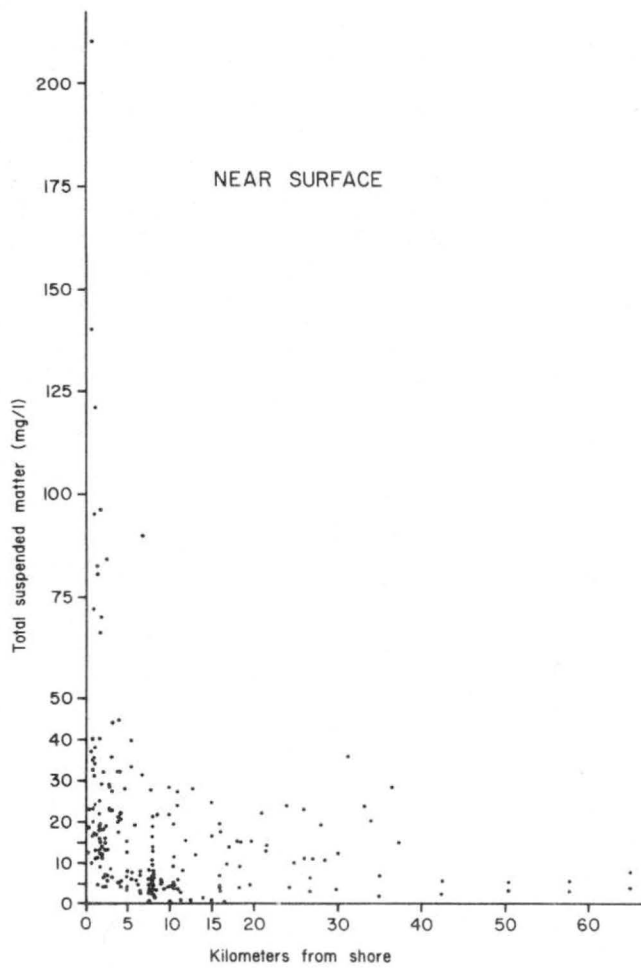


- STATIONS
- △ Bigham, 1972
  - Levy, 1968
  - Oertel, 1970, 1973, 1974
  - Oertel, 1975



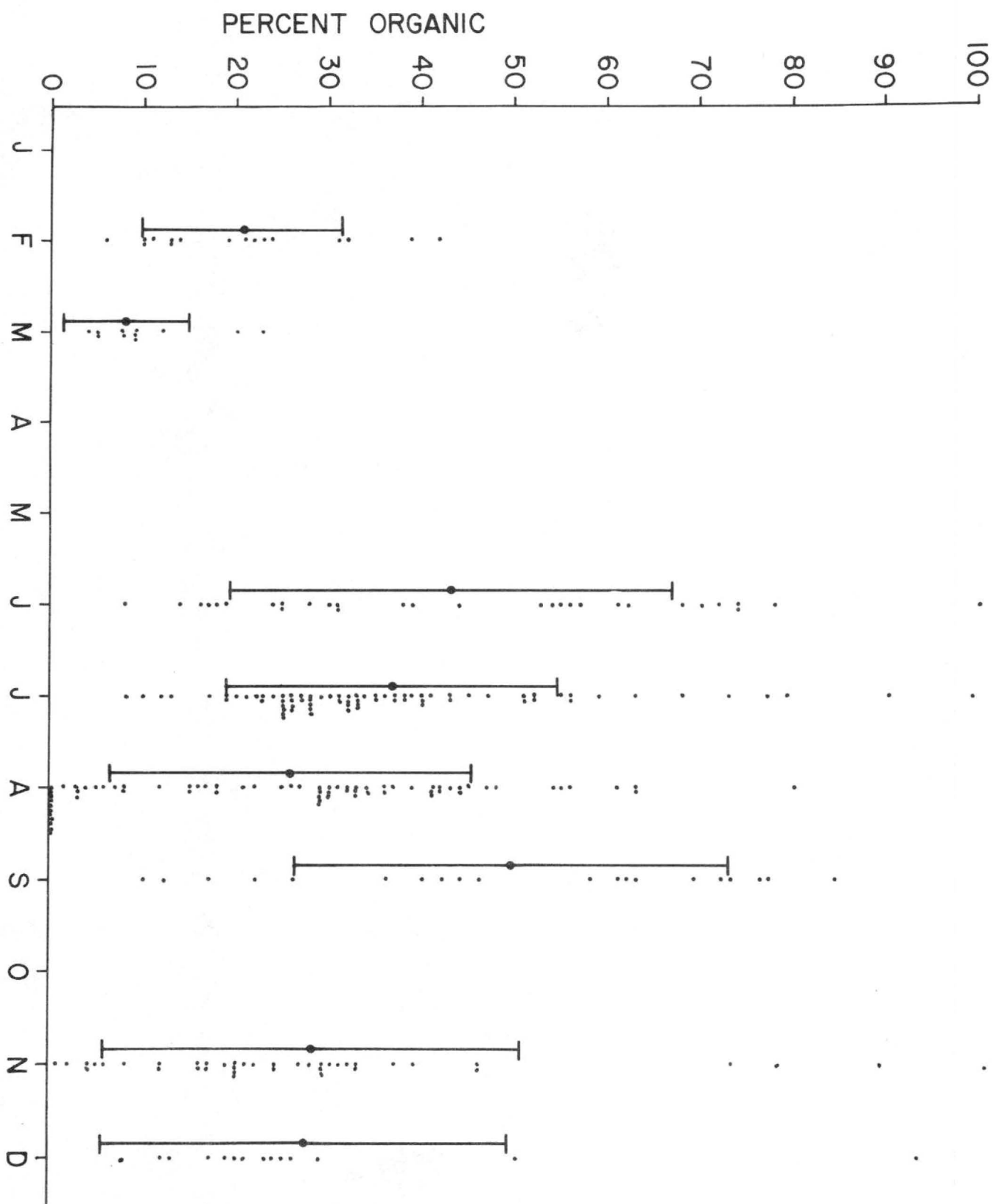
## FIGURE 4

Graphs showing the total concentrations of 490 samples relative to depth and distance from shore. The high concentrations were generally located very close to shore, whereas offshore stations generally had very low concentrations. The moderately high concentrations in the mid distances (20-35 kilometers) are from the Bigham data.



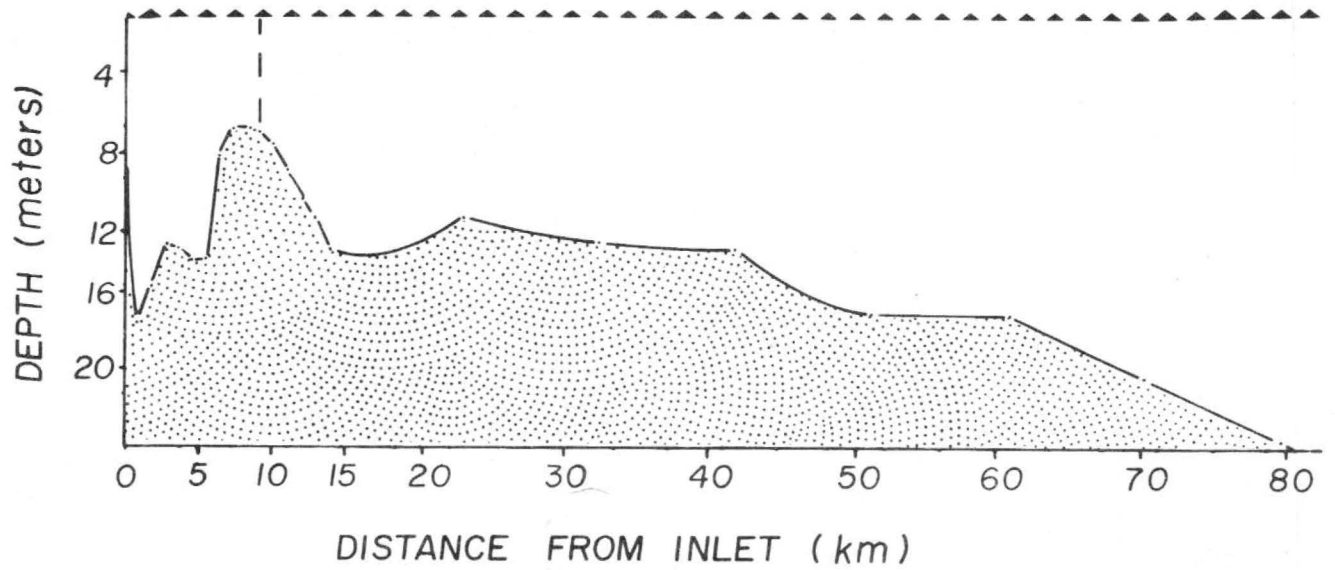
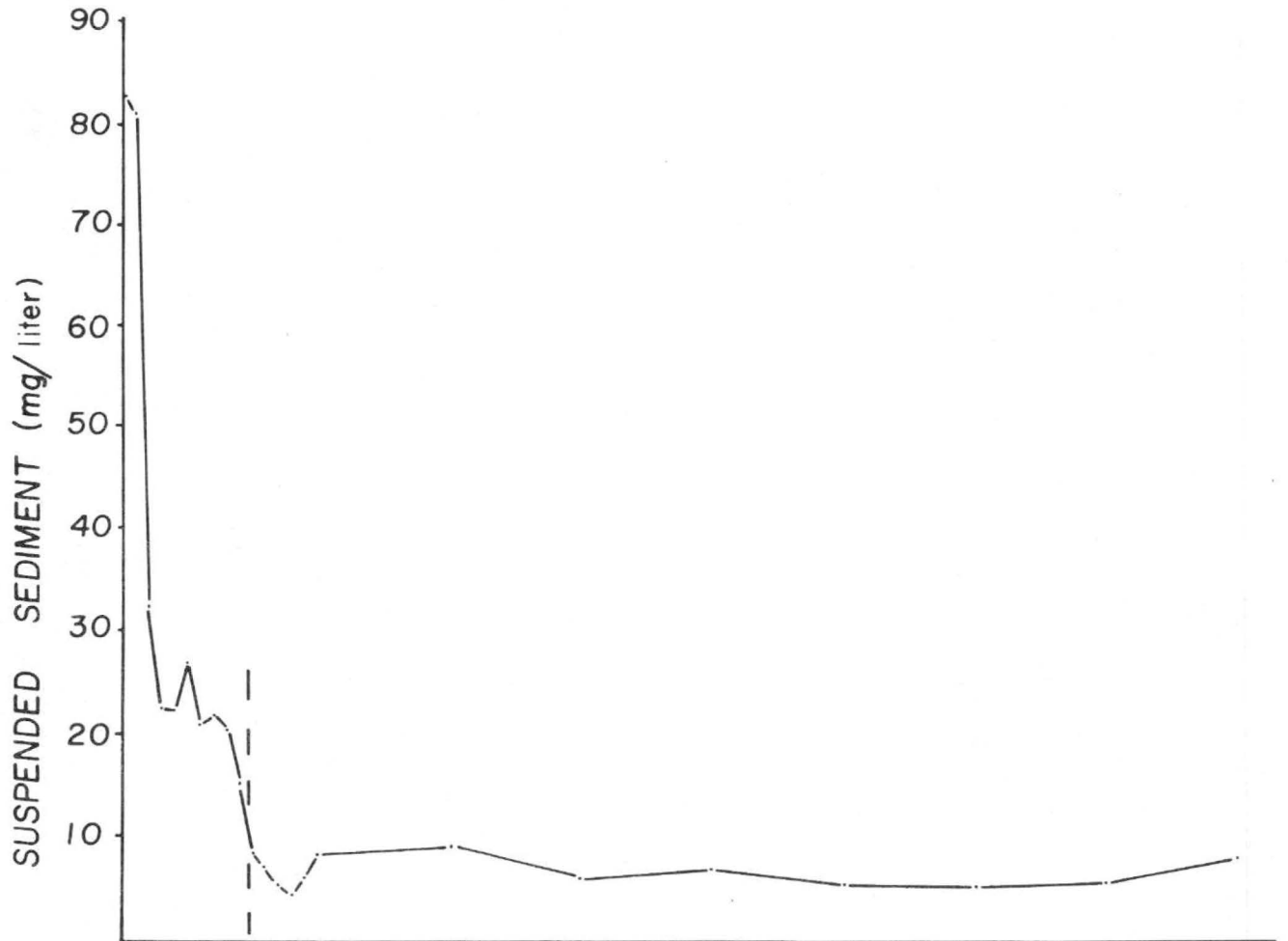
## FIGURE 5

Histograms of the percent organic material collected during monthly sampling periods. These histograms illustrate the percentage of organics for actual samples, as well as the mean and standard deviation for the number taken in a given month. While data points are also affected by their relative distances from the shore, it appears that a higher percentage of organics was present in the summer months (June, July and September) than was present during the winter (November, December, February, March).



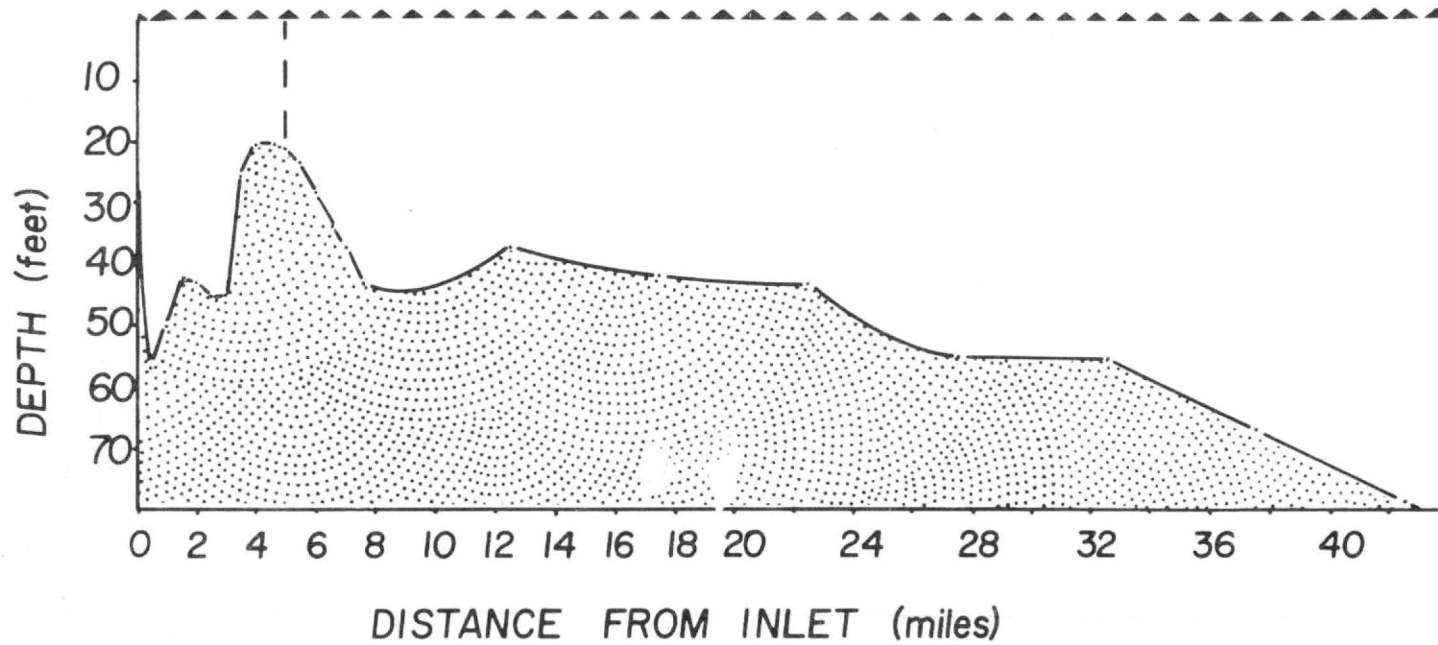
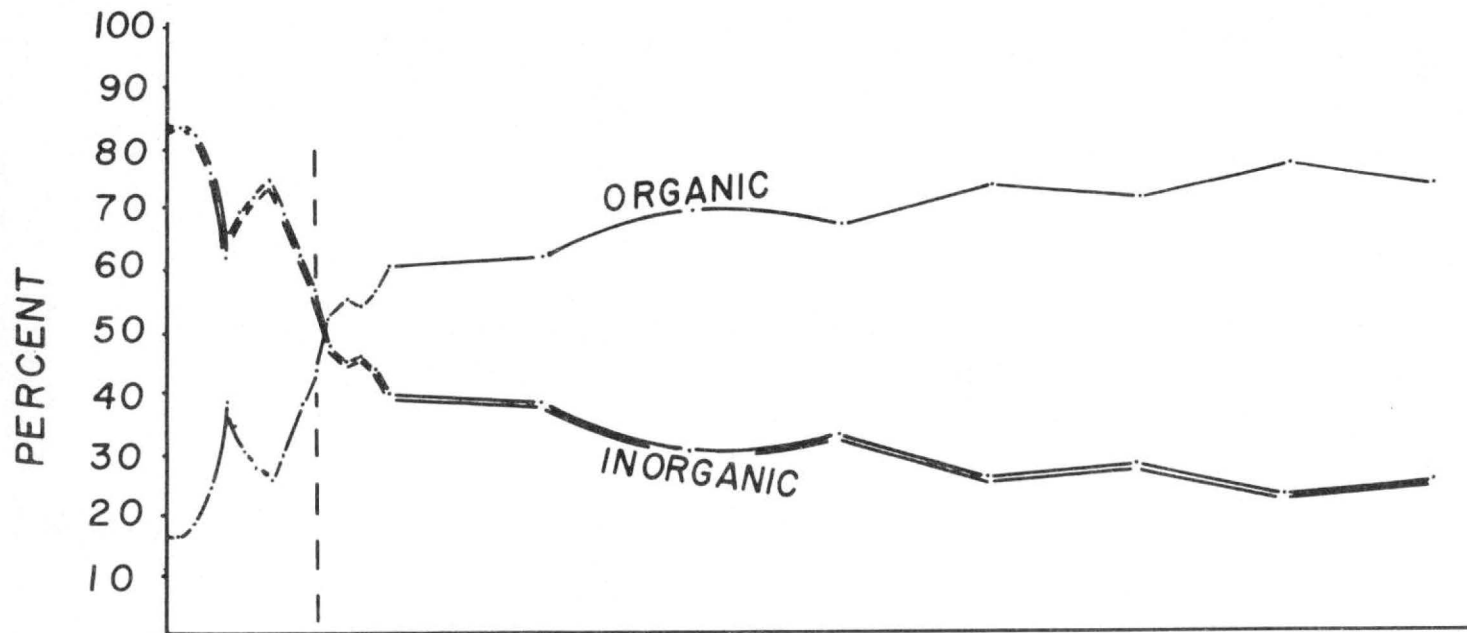
## FIGURE 6

Transect extending seaward from St. Catherines inlet illustrating the surface concentrations of suspended sediment between the inlet and a point 80 km offshore. The distal shoals of the ebb delta are located approximately 10 km seaward of the inlet. Concentrations decrease rapidly and continuously between the inlet throat and the distal shoals. Seaward of the distal shoals, concentrations are low and relatively constant.



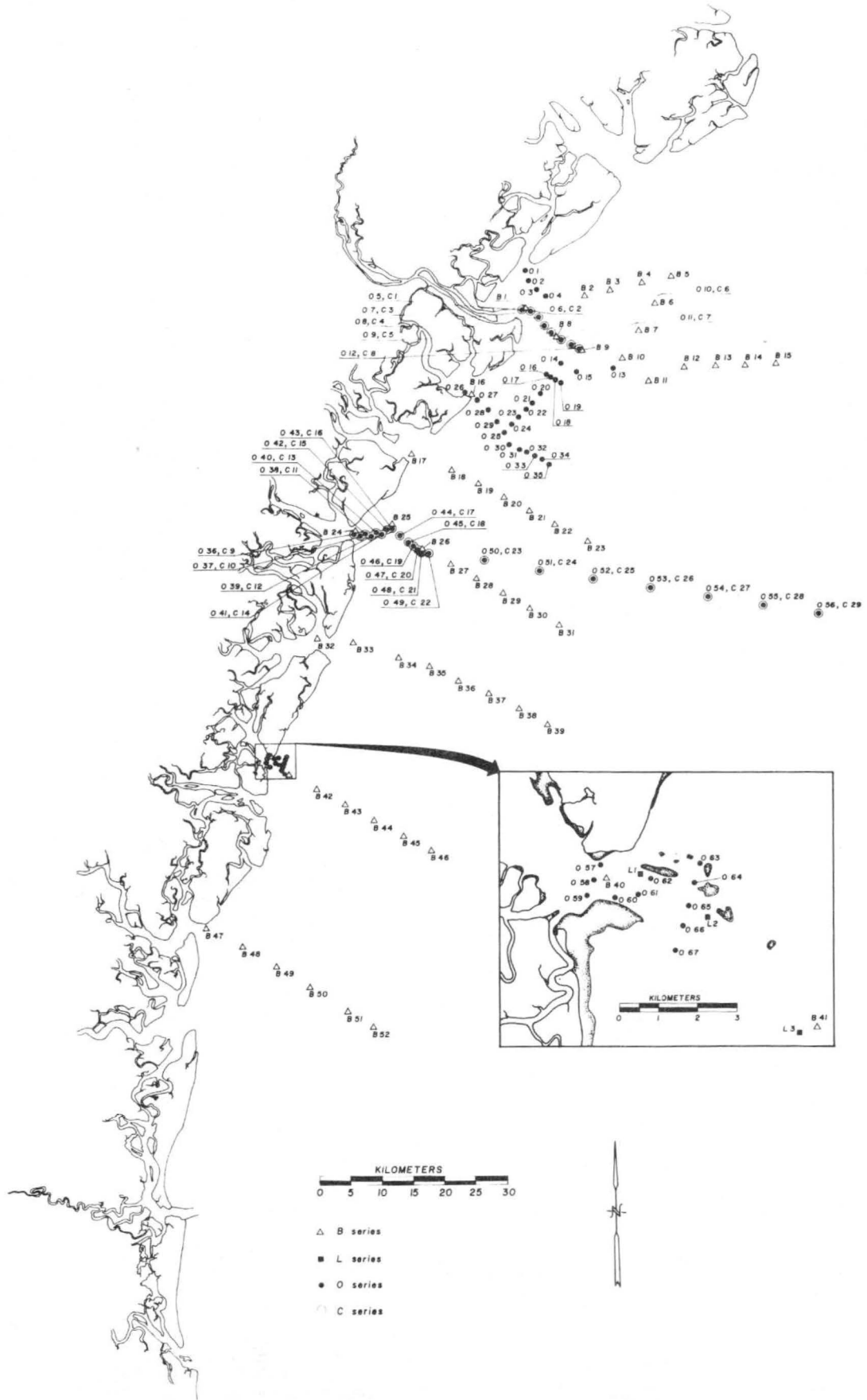
## FIGURE 7

Transects extending seaward from St. Catherines inlet illustrating the relative organic and inorganic percentages of surface samples. The percentage of inorganic matter was greatest near the inlet throat, and decreased in a seaward direction. The percentages of organic and inorganic material were approximately equal above the distal shoals of the ebb delta. Seaward of the distal shoals the organic fraction increased slowly and continuously and comprised approximately 80 percent of the sample 80 km (43.2 miles) from the inlet.



## FIGURE 8

Location map of all suspended sediment sample stations.  
Data for all of the stations are tabulated in the appendix.



## CONCLUSIONS

1. Satellite photography illustrates that a band of turbid water exists between Cape Romain, South Carolina and Jacksonville, Florida.
2. The band is widest adjacent to the Savannah River entrance and attenuates towards the south near Jacksonville, Florida and towards the north near Cape Romain, South Carolina.
3. The concentration of suspended sediment in the band is areally
4. Concentrations of suspended sediment are highest adjacent to the shoreline and lowest offshore.
5. The concentration of organic matter suspended in the water column may be higher in the summer and early fall than it is during the remainder of the year.
6. The percentage of inorganic vs. organic material is higher landward of the tidal deltas than it is seaward of the tidal deltas.

## ACKNOWLEDGMENTS

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## APPENDIX

Partial data for suspended sediment stations including dates, times, water depths, sample depths, salinity, total suspended concentrations, and percent organics.

| STATION NO.     | TIME | DATE    | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-----------------|------|---------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| <u>B SERIES</u> |      |         |                      |                       |              |                               |                  |
| B-1             | 2045 | 7/13/70 | 12.5                 | 6.1                   | 31.3         | 29.2                          | 31               |
| B-2             | 1825 | 7/14/70 | 11.6                 | 4.6                   | 33.9         | 21.8                          | 38               |
| B-3             | 1746 | 7/14/70 | 12.1                 | 4.6                   | 34.0         | 22.0                          | 51               |
| B-4             | 1717 | 7/14/70 | 8.5                  | 3.0                   | 33.8         | 15.5                          | 27               |
| B-5             | 1625 | 7/14/70 | 15.8                 | 3.0                   | 34.1         | 16.6                          | 33               |
|                 |      |         |                      | 13.7                  | 35.2         | 11.0                          | 26               |
| B-6             | 1523 | 7/14/70 | 14.6                 | 3.0                   | 33.6         | 19.5                          | 13               |
|                 |      |         |                      | 12.2                  | 34.5         | 14.7                          | 19               |
| B-7             | 1434 | 7/14/70 | 14.6                 | 1.8                   | 33.3         | 15.2                          | 35               |
|                 |      |         |                      | 12.2                  | 34.6         | 11.9                          | 25               |
| B-8             | 1038 | 7/14/70 | 4.6                  | 2.1                   | 32.6         | 19.2                          | 25               |
| B-9             | 1131 | 7/14/70 | 12.8                 | 1.8                   | 32.9         | 28.0                          | 21               |
|                 |      |         |                      | 11.0                  | 34.4         | 6.3                           | 28               |
| B-10            | 1225 | 7/14/70 | 14.6                 | 3.0                   | 33.2         | 13.8                          | 19               |
|                 |      |         |                      | 11.6                  | 35.0         | 11.0                          | 52               |
| B-11            | 1331 | 7/14/70 | 15.5                 | 1.8                   | 33.7         | 14.1                          | 30               |
|                 |      |         |                      | 12.2                  | 35.3         | 13.8                          | 22               |
| B-12            | 1237 | 7/18/70 | 15.8                 | 1.8                   | 35.2         | 11.1                          | 35               |
|                 |      |         |                      | 13.7                  | 35.1         | 17.2                          | 40               |
| B-13            | 1337 | 7/18/70 | 17.7                 | 3.7                   | 35.1         | 12.2                          | 8                |
|                 |      |         |                      | 13.7                  | 35.4         | 19.4                          | 41               |
| B-14            | 1430 | 7/18/70 | 17.4                 | 1.8                   | 35.1         | 20.3                          | 28               |
|                 |      |         |                      | 15.8                  | 35.6         | 12.8                          | 17               |
| B-15            | 1529 | 7/18/70 | 20.1                 | 1.8                   | 35.5         | 14.8                          | 33               |
|                 |      |         |                      | 16.8                  | 35.5         | 12.4                          | 29               |

| STATION NO. | TIME | DATE    | WATER<br>DEPTH<br>(meters) | SAMPLE<br>DEPTH<br>(meters) | SALINITY<br>(‰) | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |
|-------------|------|---------|----------------------------|-----------------------------|-----------------|----------------------------------|---------------------|
| B-16        | 1624 | 7/24/70 | 9.8                        | 7.6                         | 32.6            | 69.4                             | 28                  |
| B-17        | 1830 | 7/22/70 | 6.4                        | 1.5                         | 24.4            | 120.8                            | 23                  |
|             |      |         |                            | 4.6                         | 25.0            | 201.4                            | 19.7                |
| B-18        | 1959 | 7/21/70 | 3.0                        | 2.1                         | 31.6            | 31.4                             | 32.4                |
| B-19        | 1903 | 7/21/70 | 13.1                       | 3.0                         | 34.4            | 27.4                             | 37.4                |
|             |      |         |                            | 10.4                        | 34.9            | 1.2                              | 9.8                 |
| B-20        | 1826 | 7/25/70 | 14.6                       | 3.0                         | 35.2            | 6.6                              | 67.7                |
|             |      |         |                            | 12.2                        | 35.4            | 3.9                              | 98.8                |
| B-21        | 1744 | 7/21/70 | 13.7                       | 3.0                         | 35.4            | 4.6                              | 72.7                |
|             |      |         |                            | 9.1                         | 35.6            | 4.7                              | 89.0                |
| B-22        | 1656 | 7/21/70 | 15.8                       | 3.0                         | 35.7            | 3.9                              | 56.4                |
|             |      |         |                            | 12.2                        | 35.7            | -                                | -                   |
| B-23        | 1535 | 7/21/70 | 16.2                       | 1.5                         | 35.9            | 3.4                              | 76.7                |
|             |      |         |                            | 14.6                        | 36.0            | 4.6                              | 62.5                |
| B-24        | 0923 | 7/29/70 | 9.1                        | 4.6                         | 19.8            | 35.3                             | 27.4                |
| B-25        | 0951 | 7/29/70 | 4.6                        | 2.1                         | 32.2            | 32.0                             | 51.3                |
| B-26        | 2022 | 7/27/70 | 11.3                       | 1.5                         | 33.5            | 19.5                             | 30.7                |
|             |      |         |                            | 9.1                         | 33.7            | 19.6                             | 55.1                |
| B-27        | 1949 | 7/27/70 | 12.8                       | 3.0                         | 33.6            | 24.7                             | 26.5                |
|             |      |         |                            | 9.1                         | 34.7            | 31.7                             | 33.4                |
| B-28        | 1905 | 7/27/70 | 15.2                       | 1.8                         | 34.6            | 15.2                             | 51.8                |
|             |      |         |                            | 10.7                        | 35.4            | 26.9                             | 63.4                |
| B-29        | 1822 | 7/27/70 | 18.3                       | 3.0                         | 35.7            | 23.7                             | 26.1                |
|             |      |         |                            | 15.2                        | 35.6            | 21.5                             | 25.6                |
| B-30        | 1733 | 7/27/70 | 18.6                       | 1.8                         | 35.6            | 19.2                             | 45.0                |
|             |      |         |                            | 15.2                        | 35.6            | 18.1                             | 47.0                |

| STATION NO. | TIME | DATE    | WATER<br>DEPTH<br>(meters) | SAMPLE<br>DEPTH<br>(meters) | SALINITY<br>(‰) | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |
|-------------|------|---------|----------------------------|-----------------------------|-----------------|----------------------------------|---------------------|
| B-31        | 1646 | 7/27/70 | 18.6                       | 1.8                         | 35.8            | 23.5                             | 25.3                |
|             |      |         |                            | 16.8                        | 35.8            | 34.5                             | 25.2                |
| B-32        | 1736 | 7/28/70 | 9.4                        | 3.0                         | 32.1            | 40.1                             | 24.6                |
|             |      |         |                            | 6.1                         | 32.8            | 76.6                             | 22.6                |
| B-33        | 1106 | 7/28/70 | 6.7                        | 1.5                         | 31.5            | 44.0                             | 40.4                |
|             |      |         |                            | 5.5                         | 31.6            | 35.7                             | 25.3                |
| B-34        | 1147 | 7/28/70 | 8.8                        | 2.1                         | 34.1            | 23.9                             | 33.9                |
|             |      |         |                            | 6.7                         | 34.0            | 34.3                             | 32.0                |
| B-35        | 1220 | 7/28/70 | 11.6                       | 3.0                         | 34.2            | 17.6                             | 37.0                |
|             |      |         |                            | 10.7                        | 35.0            | 22.4                             | 40.1                |
| B-36        | 1248 | 7/28/70 | 13.1                       | 1.5                         | 34.6            | 22.1                             | 78.7                |
|             |      |         |                            | 9.1                         | 35.4            | 21.6                             | 32.1                |
| B-37        | 1336 | 7/28/70 | 14.6                       | 3.0                         | 35.6            | 22.9                             | 26.0                |
|             |      |         |                            | 9.1                         | 35.7            | 14.0                             | 36.5                |
| B-38        | 1417 | 7/28/70 | 20.1                       | 3.0                         | 35.7            | 36.1                             | 55.7                |
|             |      |         |                            | 16.8                        | 35.7            | 15.5                             | 42.8                |
| B-39        | 1503 | 7/28/70 | 21.3                       | 3.0                         | 35.9            | 28.4                             | 38.5                |
|             |      |         |                            | 19.8                        | 35.9            | 39.9                             | 24.3                |
| B-40        | 1640 | 8/23/70 | 11.6                       | 4.6                         | 34.0            | 43.4                             | 25.6                |
| B-41        | 1717 | 8/23/70 | 5.2                        | 2.4                         | 34.7            | 44.6                             | 56.0                |
| B-42        | 1740 | 8/23/70 | 10.1                       | 2.4                         | 24.4            | 21.5                             | 41.0                |
|             |      |         |                            | 7.6                         | 35.6            | 33.2                             | 36.3                |
| B-43        | 1909 | 9/17/70 | 12.2                       | 1.5                         | 34.3            | 12.0                             | 69.0                |
|             |      |         |                            | 10.7                        | 34.6            | 31.8                             | 40.3                |
| B-44        | 1822 | 9/17/70 | 13.4                       | 1.5                         | 35.0            | 9.6                              | 76.8                |
|             |      |         |                            | 12.2                        | 35.2            | 35.2                             | 60.6                |

| STATION NO.     | TIME | DATE    | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-----------------|------|---------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| B-45            | 1733 | 9/17/70 | 14.6                 | 1.5                   | 35.6         | 12.8                          | 84.8             |
|                 |      |         |                      | 12.2                  | -            | 27.6                          | 73.3             |
| B-46            | 1643 | 9/17/70 | 18.3                 | 1.5                   | 35.9         | 11.1                          | 71.8             |
|                 |      |         |                      | 16.8                  | 35.7         | 33.1                          | 61.5             |
| B-47            | 1102 | 9/15/70 | 11.3                 | 1.5                   | 31.8         | 32.5                          | 12.1             |
|                 |      |         |                      | 9.8                   | 32.2         | 62.4                          | 41.7             |
| B-48            | 1013 | 9/17/70 | 11.6                 | 1.5                   | 32.1         | 89.7                          | 36.0             |
|                 |      |         |                      | 10.7                  | 33.2         | 127.5                         | 25.7             |
| B-49            | 1101 | 9/17/70 | 12.5                 | 1.5                   | 33.8         | 28.1                          | 9.6              |
|                 |      |         |                      | 10.7                  | 34.3         | 47.2                          | 22.3             |
| B-50            | 1206 | 9/17/70 | 15.2                 | 1.5                   | 35.0         | 15.0                          | 76.4             |
|                 |      |         |                      | 13.7                  | 35.4         | 32.8                          | 45.7             |
| B-51            | 1312 | 9/17/70 | 15.8                 | 1.5                   | 35.4         | 9.9                           | 61.9             |
|                 |      |         |                      | 13.7                  | 35.5         | 29.0                          | 58.1             |
| B-52            | 1307 | 9/17/70 | 15.2                 | 1.5                   | 35.7         | 10.6                          | 44.4             |
|                 |      |         |                      | 13.7                  | 35.7         | 29.3                          | 17.3             |
| <u>L SERIES</u> |      |         |                      |                       |              |                               |                  |
| L-1             | 0818 | 6/30/67 | 11.9                 | 0.6                   | 21.1         | 12.6                          | -                |
|                 | 1424 | 6/30/67 |                      | 0.6                   | 25.6         | 18.5                          | -                |
|                 | 0818 | 6/30/67 |                      | 5.2                   | 23.7         | 23.6                          | -                |
|                 | 1424 | 6/30/67 |                      | 5.5                   | 27.4         | 8.0                           | -                |
|                 | 0818 | 6/30/67 |                      | 10.7                  | 24.2         | 15.0                          | -                |
|                 | 1424 | 6/30/67 |                      | 11.6                  | 29.1         | 44.1                          | -                |
| L-2             | 0823 | 6/30/67 | 8.5                  | 0.6                   | 23.0         | 13.2                          | -                |
|                 | 1427 | 6/30/67 |                      | 0.6                   | 25.9         | 5.5                           | -                |

| STATION NO.     | TIME | DATE     | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-----------------|------|----------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| L-2             | 0823 | 6/30/67  | 8.5                  | 3.7                   | 24.8         | 28.0                          | -                |
|                 | 1427 | 6/30/67  | 8.5                  | 4.3                   | 29.1         | 10.5                          | -                |
|                 | 0823 | "        |                      | 7.0                   | 25.3         | 31.8                          | -                |
|                 | 1427 | "        |                      | 8.2                   | 29.0         | 17.7                          | -                |
| L-3             | 0830 | 6/30/67  | 7.0                  | 0.6                   | 26.0         | 7.7                           | -                |
|                 | 1432 | "        |                      | 0.6                   | 23.6         | 6.0                           | -                |
|                 | 0830 | "        |                      | 3.0                   | 27.0         | 10.5                          | -                |
|                 | 1432 | "        |                      | 3.7                   | 29.8         | 11.5                          | -                |
|                 | 0830 | "        |                      | 5.8                   | 29.4         | 33.9                          | -                |
|                 | 1432 | "        |                      | 6.7                   | 29.9         | 17.2                          | -                |
| <u>0 SERIES</u> |      |          |                      |                       |              |                               |                  |
| 0-1             | 1130 | 11/12/74 | 9.1                  | 0.3                   | 19.5         | 19.3                          | 1.6              |
|                 |      | "        |                      | 8.1                   | 18.5         | 61.0                          | -                |
| 0-2             | 1240 | "        | 8.5                  | 0.3                   | 20.0         | 28.3                          | 10.6             |
|                 |      | "        |                      | 7.5                   | 20.0         | 44.3                          | 9.0              |
| 0-3             | 1252 | "        | 7.3                  | 0.3                   | 22.0         | 32.0                          | 0.9              |
|                 |      | "        |                      | 6.3                   | 20.2         | 42.7                          | 17.1             |
| 0-4             | 1305 | "        | 2.1                  | 0.3                   | 22.0         | 33.3                          | 15.9             |
| 0-5             | 1000 | "        | 11.9                 | 0.3                   | 19.5         | 96.0                          | 19.5             |
|                 |      | "        |                      | 10.9                  | 22.0         | 58.7                          | 22.2             |
|                 |      | 8/23/73  | 11.7                 | 0.3                   | 27.0         | 12.2                          | 8.2              |
|                 |      | "        |                      | 10.7                  | 26.5         | 103.2                         | -                |
| 0-6             | 1005 | 11/12/74 | 11.7                 | 0.3                   | 22.0         | 28.0                          | 31.1             |
|                 |      | "        |                      | 10.7                  | 22.8         | 52.3                          | 24.3             |
| 0-7             | 1010 | "        | 10.2                 | 0.3                   | 22.0         | 28.3                          | 29.3             |

| STATION NO. | TIME | DATE     | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|------|----------|----------------------|-----------------------|--------------|-------------------------------|------------------|
|             |      | 11/12/74 |                      | 9.2                   | 20.9         | 36.0                          | 20.3             |
| 0-8         | 1015 | "        | 4.6                  | 0.3                   | 20.1         | 20.0                          | 23.5             |
|             |      | "        |                      | 3.6                   | 27.0         | 24.3                          | 8.2              |
| 0-9         |      | 7/27/73  | 13.8                 | 0.3                   | 36.0         | 3.4                           | 11.8             |
|             |      | "        |                      | 12.8                  | 35.0         | 4.4                           | 31.9             |
|             |      | "        | 14.7                 | 0.3                   | 36.0         | 7.8                           | 28.2             |
|             |      |          |                      | 13.7                  | 38.0         | 8.0                           | 32.5             |
|             |      | 8/23/73  | 10.1                 | 0.3                   | 32.0         | 6.6                           | 15.2             |
|             |      | "        |                      | 9.1                   | 33.0         | -                             | -                |
|             |      | "        | 12.6                 | 0.3                   | 26.0         | 12.6                          | -                |
|             |      | "        |                      | 11.6                  | 26.5         | 5.6                           | 17.9             |
| 0-10        | 1020 | 11/12/74 | 5.5                  | 0.3                   | 24.0         | 7.0                           | 28.6             |
|             |      | "        |                      | 4.5                   | 22.3         | 14.1                          | 72.7             |
| 0-11        | 1025 | "        | 9.1                  | 0.3                   | 22.0         | 6.6                           | 12.1             |
|             |      | "        |                      | 8.1                   | 26.0         | 8.8                           | 38.6             |
| 0-12        | 1030 | "        | 11.3                 | 0.3                   | 26.0         | 4.2                           | 19.1             |
|             |      | "        |                      | 10.3                  | 25.5         | 3.6                           | 5.5              |
| 0-13        |      | 7/27/73  | 15.6                 | 0.3                   | 34.0         | 4.2                           | 38.1             |
|             |      | "        |                      | 14.6                  | 33.0         | 9.5                           | 36.4             |
|             |      | "        | 16.8                 | 0.3                   | 34.0         | 4.4                           | 59.1             |
|             |      | "        |                      | 15.8                  | 36.0         | 4.6                           | 43.5             |
|             |      | 8/23/73  | 15.6                 | 0.3                   | 29.0         | 3.0                           | 5.2              |
|             |      | "        | 15.6                 | 0.3                   | 35.0         | 6.8                           | -                |
|             |      | "        |                      | 14.6                  | 36.0         | 2.2                           | -                |
| 0-14        | 0700 | 11/8/73  | 10.1                 | 0.3                   | -            | 0.6                           | 33.3             |
|             |      |          | 10.1                 | 9.1                   | -            | 1.2                           | -                |

| STATION NO. | TIME | DATE    | WATER DEPTH<br>(meters) | SAMPLE DEPTH<br>(meters) | SALINITY<br>(‰) | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |
|-------------|------|---------|-------------------------|--------------------------|-----------------|----------------------------------|---------------------|
| 0-14        | 0800 | 11/8/73 | 10.1                    | 0.3                      | -               | 2.6                              | 46.2                |
|             |      |         | 10.1                    | 9.1                      | -               | 1.0                              | 20.0                |
|             | 0900 |         | 10.1                    | 0.3                      | -               | 3.4                              | 11.8                |
|             |      |         | 10.1                    | 9.1                      | -               | 12.0                             | 78.3                |
|             |      | 11/8/73 | 10.1                    | 0.3                      | -               | -                                | -                   |
|             | 1000 | "       | 10.1                    | 9.1                      | -               | 2.2                              | 45.5                |
|             |      |         | 10.1                    | 0.3                      | -               | 2.6                              | -                   |
|             |      |         | "                       | 9.1                      | -               | 1.2                              | 33.3                |
|             | 1200 | "       | "                       | 0.3                      | -               | 8.4                              | 28.6                |
|             |      |         | "                       | 9.1                      | -               | -                                | -                   |
|             | 1300 | "       | "                       | 0.3                      | -               | 5.0                              | 32.0                |
|             |      |         | "                       | 9.1                      | -               | 4.8                              | 20.8                |
|             | 1400 | "       | "                       | 0.3                      | -               | 3.2                              | -                   |
|             |      |         | "                       | 9.1                      | -               | 4.0                              | 30.0                |
|             | 1500 | "       | "                       | 0.3                      | -               | 4.8                              | 4.2                 |
|             |      |         | "                       | 9.1                      | -               | 4.4                              | 27.3                |
|             | 1600 | "       | "                       | 0.3                      | -               | 5.0                              | 28.0                |
|             |      |         | "                       | 9.1                      | -               | 3.8                              | 15.8                |
|             | 1700 | "       | "                       | 0.3                      | -               | 3.4                              | 100.0               |
|             |      |         | "                       | 9.1                      | -               | 1.2                              | 16.7                |
|             | 1800 | "       | "                       | 0.3                      | -               | 6.0                              | 20.0                |
|             |      |         | "                       | 9.1                      | -               | -                                | -                   |
|             | 1900 | "       | "                       | 0.3                      | -               | 3.6                              | 88.9                |
|             |      |         | "                       | 9.1                      | -               | 4.9                              | 36.7                |
| 0-15        | 1100 | 3/7/74  | 9.1                     | 0.3                      | -               | 3.8                              | -                   |
|             |      |         | "                       | 4.7                      | -               | 4.6                              | -                   |

NOT TAKEN

| STATION NO. | TIME | DATE    | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|------|---------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-15        |      |         | 9.1                  | 9.1                   | NOT TAKEN    | 10.6                          | 20.8             |
|             | 1200 | 3/7/74  | "                    | 0.3                   |              | 4.0                           | 0.0              |
|             |      |         | "                    | 4.7                   |              | 3.4                           | 0.0              |
|             |      |         | "                    | 9.1                   |              | 8.6                           | 7.9              |
|             | 1300 | "       | "                    | 0.3                   |              | 4.4                           | 4.5              |
|             |      |         | "                    | 4.7                   |              | 6.4                           | 9.4              |
|             |      |         | "                    | 9.1                   |              | 10.6                          | 3.8              |
|             | 1400 |         | "                    | 0.3                   |              | 11.6                          | 12.1             |
|             |      |         | "                    | 4.7                   |              | 7.0                           | 0.0              |
|             |      |         | "                    | 9.1                   |              | 10.6                          | -                |
|             | 1500 |         | "                    | 0.3                   |              | 9.0                           | 7.8              |
|             |      |         | "                    | 4.7                   |              | 7.0                           | 8.6              |
|             |      |         | "                    | 9.1                   |              | 11.6                          | 8.6              |
|             | 1600 |         | "                    | 0.3                   |              | 4.0                           | -                |
|             |      |         | "                    | 4.7                   |              | 3.8                           | 5.3              |
|             |      |         | "                    | 9.1                   |              | 7.0                           | 22.9             |
| 0-16        |      | 6/26/73 | 11.0                 | 0.3                   |              | 4.6                           | 0.0              |
|             |      |         | "                    | 5.2                   |              | 2.2                           | -                |
|             |      |         | "                    | 10.0                  |              | 2.4                           | 8.2              |
| 0-17        |      | "       | 12.2                 | 0.3                   |              | 5.6                           | 14.3             |
|             |      |         | "                    | 5.8                   | 4.6          | 30.4                          |                  |
|             |      |         | "                    | 11.2                  | 3.2          | 18.7                          |                  |
| 0-18        |      | 8/14/73 | 12.2                 | 0.3                   | 31.5         | 18.8                          | 28.7             |
|             |      |         | "                    | 11.2                  | 31.5         | 8.8                           | 31.8             |
|             |      | "       | "                    | 0.3                   | 30.0         | 6.0                           | 41.0             |
|             |      |         | "                    | 11.2                  | 32.0         | 5.0                           | 36.0             |

| STATION NO. | TIME | DATE    | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|------|---------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-18        |      | 8/14/73 | 12.2                 | 0.3                   | 31.0         | 8.2                           | 41.5             |
|             |      |         | "                    | 11.2                  | 32.0         | 7.6                           | 34.2             |
|             |      |         | "                    | 0.3                   | 30.5         | 9.6                           | 29.2             |
|             |      |         | "                    | 11.2                  | 32.0         | 19.2                          | 62.5             |
|             |      | 8/14/73 | "                    | 0.3                   | 31.0         | 5.2                           | 30.8             |
|             |      |         |                      | 11.2                  | 32.0         | 4.0                           | 55.0             |
|             |      |         | "                    | 0.3                   | 31.0         | 10.8                          | 29.6             |
|             |      |         |                      | 11.2                  | 31.5         | 8.0                           | 32.5             |
|             |      |         | "                    | 0.3                   | 31.0         | 8.2                           | 39.0             |
|             |      |         |                      | 11.2                  | 32.0         | 3.2                           | 0.0              |
|             |      |         | "                    | 0.3                   | 31.0         | 4.8                           | 4.2              |
|             |      |         |                      | 11.2                  | 32.0         | 4.0                           | -                |
|             |      |         | "                    | 0.3                   | 31.5         | 16.4                          | 34.1             |
|             |      |         |                      | 11.2                  | 32.0         | 7.8                           | 41.0             |
|             |      |         | "                    | 0.3                   | 31.0         | 7.0                           | 54.3             |
|             |      |         |                      | 11.2                  | 32.0         | 2.8                           | 21.4             |
|             |      |         | "                    | 0.3                   | 31.5         | -                             | -                |
|             |      |         |                      | 11.2                  | 32.0         | 8.8                           | 43.2             |
|             |      |         | "                    | 0.3                   | 31.5         | 6.4                           | 62.5             |
|             |      |         |                      | 11.2                  | 32.0         | 3.8                           | -                |
|             |      | "       | 0.3                  | 32.0                  | 12.8         | 79.7                          |                  |
|             |      |         | 11.2                 | 32.0                  | 16.2         | 29.6                          |                  |
| 0-19        |      | 6/26/73 | 12.8                 | 0.3                   | -NOT TAKEN-  | 5.0                           | 53.8             |
|             |      |         | "                    | 6.1                   |              | 2.2                           | 100.0            |
|             |      |         | "                    | 11.8                  |              | 5.2                           | 24.0             |

| STATION NO. | TIME | DATE     | WATER DEPTH<br>(meters) | SAMPLE DEPTH<br>(meters) | SALINITY<br>(‰)     | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |      |
|-------------|------|----------|-------------------------|--------------------------|---------------------|----------------------------------|---------------------|------|
| 0-20        | 1441 | 12/28/74 | 12.2                    | 0.3                      | -----NOT TAKEN----- | 2.6                              | -                   |      |
|             |      | "        |                         | 11.2                     |                     | 2.0                              | -                   |      |
| 0-21        | 1448 | "        | 12.2                    | 0.3                      |                     | 2.2                              | -                   |      |
|             |      | "        |                         | 11.2                     |                     | 2.6                              | -                   |      |
| 0-22        | 1501 | "        | 13.1                    | 0.3                      |                     | 1.6                              | -                   |      |
|             |      | "        | "                       | 12.1                     |                     | 5.0                              | -                   |      |
| 0-23        | 1511 | "        | 9.4                     | 0.3                      |                     | 3.4                              | -                   |      |
| 0-24        | 1525 | "        | 8.8                     | 0.3                      |                     | 14.0                             | 12.8                |      |
| 0-25        | 1134 | 12/16/74 | 5.5                     | 0.3                      |                     | 29.0                             | 27.7                | 26.4 |
|             |      | "        | "                       | 4.5                      |                     | 29.5                             | 47.7                | 23.7 |
| 0-26        | 1215 | "        | 7.6                     | 0.3                      | 23.7                | 22.7                             | 13.2                |      |
|             |      | "        | "                       | 6.6                      | 22.2                | 28.3                             | 20.1                |      |
| 0-27        | 1205 | "        | 8.2                     | 0.3                      | 27.9                | 23.0                             | 29.1                |      |
|             |      | "        | "                       | 7.2                      | 25.5                | 28.0                             | 8.2                 |      |
| 0-28        | 1154 | "        | 5.5                     | 0.3                      | 23.8                | 35.7                             | 20.5                |      |
|             |      | "        | "                       | 4.5                      | 28.0                | 39.0                             | 18.7                |      |
| 0-29        | 1142 | "        | 4.0                     | 0.3                      | 27.2                | 39.7                             | 23.4                |      |
|             |      | "        | "                       | 3.0                      | 25.2                | 126.7                            | 17.1                |      |
| 0-30        | 1120 | "        | 10.7                    | 0.3                      | 30.0                | 3.8                              | 94.7                |      |
|             |      | "        | "                       | 9.7                      | 29.5                | 4.8                              | 50.0                |      |
| 0-31        | 1530 | 12/28/74 | 13.4                    | 0.3                      | -----NOT TAKEN----- | 1.0                              | -                   |      |
| 0-32        | 1539 | "        | 13.1                    | 0.3                      |                     | 1.0                              | -                   |      |
| 0-33        | 1548 | "        | 11.9                    | 0.3                      |                     | 1.4                              | -                   |      |
| 0-34        | 1557 | "        | 11.6                    | "                        |                     | 0.8                              | 25.0                |      |
| 0-35        | 1605 | "        | 11.6                    | "                        |                     | 0.4                              | -                   |      |
| 0-36        | 0835 | 6/6/74   | 3.7                     | "                        |                     | 27.0                             | 82.2                | 16.3 |

| STATION | TIME | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|---------|------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-37    | 0839 | 6/6/74      | 13.3                 | 0.3                   | 28.0         | 80.4                          | 16.9             |
| 0-38    | 0841 | "           | 16.5                 | "                     | 28.0         | 32.0                          | 18.1             |
| 0-39    | 0845 | "           | 10.1                 | "                     | 28.0         | 22.8                          | 24.6             |
| 0-40    | 0841 | "           | 7.8                  | "                     | 28.0         | 22.6                          | 38.9             |
|         | 0851 | "           | 12.0                 | "                     | 28.5         | 27.2                          | 30.9             |
| 0-41    | 0855 | "           | 7.3                  | "                     | 29.0         | 21.2                          | 28.3             |
| 0-42    | 0858 | "           | 2.4                  | "                     | 29.5         | 22.0                          | 25.4             |
|         | 0902 | "           | 2.1                  | "                     | 30.0         | 20.6                          | 31.1             |
| 0-43    | 0905 | "           | 5.2                  | "                     | 29.5         | 15.2                          | 38.1             |
| 0-44    | 0910 | "           | 5.2                  | "                     | 29.5         | 8.2                           | 43.9             |
| 0-45    | 0913 | "           | 4.0                  | "                     | 29.5         | 7.2                           | 52.7             |
| 0-46    | 0916 | "           | 5.5                  | "                     | 29.5         | 5.4                           | 55.5             |
| 0-47    | 0919 | "           | 7.9                  | "                     | 29.5         | 4.4                           | 54.5             |
| 0-48    | 0922 | "           | 9.1                  | "                     | 30.0         | 6.0                           | 56.7             |
| 0-49    | 0925 | "           | 11.0                 | "                     | 30.0         | 8.2                           | 60.9             |
| 0-50    | 0955 | "           | 13.7                 | "                     | 29.5         | 9.0                           | 62.2             |
| 0-51    | 1020 | "           | 18.9                 | "                     | 29.5         | 6.0                           | 70.0             |
| 0-52    | 1045 | "           | 18.3                 | "                     | 30.0         | 6.8                           | 67.6             |
| 0-53    | 1110 | "           | 17.7                 | "                     | 30.0         | 5.4                           | 74.1             |
| 0-54    | 1135 | "           | 20.7                 | "                     | 29.5         | 5.0                           | 72.0             |
| 0-55    | 1158 | "           | 22.6                 | "                     | 29.5         | 5.4                           | 77.7             |
| 0-56    | 1223 | "           | 25.6                 | "                     | 29.0         | 7.8                           | 74.4             |
| 0-57    | MLW  | Summer 1970 | 5.8                  | 0.6                   | 29.5         | 19                            | -                |
|         | "    | "           | "                    | 3.0                   | 30.0         | 24                            | -                |
|         | "    | "           | "                    | 5.5                   | 30.0         | 32                            | -                |

| STATION NO. | TIME      | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|-----------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-57        | Mid-Flood | Summer 1970 | 7.0                  | 0.6                   | 32.5         | 190                           | -                |
|             | "         | "           | "                    | 3.0                   | 33.0         | 285                           | -                |
|             | "         | "           | "                    | 5.5                   | 33.0         | 300                           | -                |
|             | MHW       | "           | 8.2                  | 0.6                   | 34.0         | 70                            | -                |
|             | "         | "           | 8.2                  | 3.0                   | 34.0         | 93                            | -                |
|             | "         | "           | "                    | 5.5                   | 34.5         | 108                           | -                |
|             | Mid-Ebb   | "           | 7.0                  | 0.6                   | 33.5         | 160                           | -                |
|             | "         | :           | "                    | 3.0                   | 34.0         | 235                           | -                |
|             | "         | "           | "                    | 5.5                   | 34.5         | 255                           | -                |
| 0-58        | MLW       | "           | 6.7                  | 0.6                   | 29.0         | 10                            | -                |
|             | "         | "           | "                    | 3.0                   | 29.0         | 16                            | -                |
|             | "         | "           | "                    | 5.5                   | 29.5         | 20                            | -                |
|             | Mid-Flood | "           | 7.9                  | 0.6                   | 32.5         | 210                           | -                |
|             | "         | "           | "                    | 3.0                   | 32.5         | 263                           | -                |
|             | "         | "           | "                    | 5.5                   | 32.5         | 295                           | -                |
|             | "         | "           | "                    | 7.6                   | 33.0         | 294                           | -                |
|             | MHW       | "           | 9.1                  | 0.6                   | 32.5         | 37                            | -                |
|             | "         | "           | "                    | 3.0                   | 33.5         | 41                            | -                |
|             | "         | "           | "                    | 5.5                   | 34.0         | 52                            | -                |
|             | "         | "           | "                    | 7.9                   | 35.0         | 61                            | -                |
|             | Mid-Ebb   | "           | 7.9                  | 0.6                   | 33.0         | 140                           | -                |
|             | "         | "           | "                    | 3.0                   | 33.5         | 155                           | -                |
|             | "         | "           | "                    | 5.5                   | 33.5         | 180                           | -                |
|             | "         | "           | "                    | 7.6                   | 33.5         | 205                           | -                |

| STATION NO. | TIME          | DATE           | WATER DEPTH<br>(meters) | SAMPLE DEPTH<br>(meters) | SALINITY<br>(‰) | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |
|-------------|---------------|----------------|-------------------------|--------------------------|-----------------|----------------------------------|---------------------|
| 0-59        | MLW           | Summer<br>1970 | 12.8                    | 0.6                      | 28.0            | 17                               | -                   |
|             | "             | "              | "                       | 3.0                      | 28.5            | 23                               | -                   |
|             | "             | "              | "                       | 5.5                      | 29.0            | 24                               | -                   |
|             | "             | "              | "                       | 7.9                      | 29.5            | 28                               | -                   |
|             | "             | "              | "                       | 10.4                     | 30.0            | 23                               | -                   |
|             | Mid-<br>Flood | "              | 14.0                    | 0.6                      | 31.0            | 95                               | -                   |
|             | "             | "              | "                       | 3.0                      | 31.0            | 124                              | -                   |
|             | "             | "              | "                       | 5.5                      | 31.0            | 127                              | -                   |
|             | "             | "              | "                       | 7.9                      | 31.5            | 110                              | -                   |
|             | "             | "              | "                       | 10.4                     | 31.5            | 105                              | -                   |
|             | "             | "              | "                       | 12.8                     | 32.0            | 122                              | -                   |
|             | MHW           | "              | 15.2                    | 0.6                      | 31.5            | 31                               | -                   |
|             | "             | "              | "                       | 3.0                      | 32.0            | 22                               | -                   |
|             | "             | "              | "                       | 5.5                      | 33.5            | 35                               | -                   |
|             | "             | "              | "                       | 7.9                      | 34.5            | 37                               | -                   |
|             | "             | "              | "                       | 10.4                     | 34.5            | 33                               | -                   |
|             | "             | "              | "                       | 12.8                     | 35.0            | 47                               | -                   |
|             | Mid-<br>Ebb   | "              | 14.0                    | 0.6                      | 30.5            | 72                               | -                   |
|             | "             | "              | "                       | 3.0                      | 31.5            | 83                               | -                   |
|             | "             | "              | "                       | 5.5                      | 33.0            | 150                              | -                   |
|             | "             | "              | "                       | 7.9                      | 33.5            | 310                              | -                   |
|             | "             | "              | "                       | 10.4                     | 33.5            | 345                              | -                   |
|             | "             | "              | "                       | 12.8                     | 33.5            | 440                              | -                   |
| 0-60        | MLW           | "              | 10.7                    | 0.6                      | 30.5            | 13                               | -                   |

| STATION NO. | TIME      | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|-----------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-60        | MLW       | Summer 1970 | 10.7                 | 3.0                   | 30.5         | 24                            | -                |
|             | "         | "           | "                    | 5.5                   | 31.0         | 27                            | -                |
|             | "         | "           | "                    | 7.9                   | 31.5         | 32                            | -                |
|             | "         | "           | "                    | 10.4                  | 31.5         | 85                            | -                |
|             | Mid-Flood | "           | 11.9                 | 0.6                   | 30.5         | 34                            | -                |
|             | "         | "           | "                    | 3.0                   | 31.0         | 43                            | -                |
|             | "         | "           | "                    | 5.5                   | 32.0         | 76                            | -                |
|             | "         | "           | "                    | 7.9                   | 32.0         | 97                            | -                |
|             | "         | "           | "                    | 10.4                  | 32.5         | 104                           | -                |
|             | MHW       | "           | 13.4                 | 0.6                   | 33.0         | 17                            | -                |
|             | "         | "           | "                    | 3.0                   | 34.0         | 23                            | -                |
|             | "         | "           | "                    | 5.5                   | 35.0         | 22                            | -                |
|             | "         | "           | "                    | 7.9                   | 35.0         | 28                            | -                |
|             | "         | "           | "                    | 10.4                  | 35.5         | 33                            | -                |
|             | "         | "           | "                    | 12.8                  | 35.5         | 36                            | -                |
|             | Mid-Ebb   | "           | 11.9                 | 0.6                   | 31.0         | 24                            | -                |
|             | "         | "           | "                    | 3.0                   | 31.0         | 25                            | -                |
|             | "         | "           | "                    | 5.5                   | 31.5         | 33                            | -                |
|             | "         | "           | "                    | 7.9                   | 31.5         | 39                            | -                |
|             | "         | "           | "                    | 10.4                  | 32.5         | 54                            | -                |
| 0-61        | MLW       | "           | 11.6                 | 0.6                   | 29.5         | 13                            | -                |
|             |           | "           | "                    | 3.0                   | 30.5         | 22                            | -                |
|             |           | "           | "                    | 5.5                   | 31.0         | 21                            | -                |
|             |           | "           | "                    | 7.9                   | 31.5         | 18                            | -                |

| STATION NO. | TIME      | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|-----------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-61        | MLW       | Summer 1970 | 11.6                 | 10.4                  | 32.0         | 38                            | -                |
|             | Mid-Flood | "           | 12.7                 | 0.6                   | 31.0         | 34                            | -                |
|             |           | "           | "                    | 3.0                   | 31.5         | 45                            | -                |
|             |           | "           | "                    | 5.5                   | 32.0         | 73                            | -                |
|             |           | "           | "                    | 7.9                   | 33.0         | 89                            | -                |
|             |           | "           | "                    | 10.4                  | 34.0         | 110                           | -                |
|             | MHW       | "           | 13.7                 | 0.6                   | 34.0         | 38                            | -                |
|             |           | "           | "                    | 3.0                   | 34.5         | 46                            | -                |
|             |           | "           | "                    | 5.5                   | 35.0         | 34                            | -                |
|             |           | "           | "                    | 7.9                   | 35.0         | 32                            | -                |
|             |           | "           | "                    | 10.4                  | 35.5         | 44                            | -                |
|             | "         | "           | "                    | 12.8                  | 35.5         | 56                            | -                |
|             | Mid-Ebb   | "           | 12.7                 | 0.6                   | 30.5         | 11                            | -                |
|             |           | "           | "                    | 3.0                   | 30.5         | 15                            | -                |
|             |           | "           | "                    | 5.5                   | 31.0         | 18                            | -                |
|             |           | "           | "                    | 7.9                   | 31.5         | 33                            | -                |
|             |           | "           | "                    | 10.4                  | 32.0         | 62                            | -                |
| 0-62        | MLW       | "           | 6.7                  | 0.6                   | 29.5         | 20                            | -                |
|             | "         | "           | "                    | 3.0                   | 30.0         | 27                            | -                |
|             | "         | "           | "                    | 5.5                   | 31.0         | 34                            | -                |
|             | Mid-Flood | "           | 7.9                  | 0.6                   | 32.0         | 35                            | -                |
|             |           | "           | "                    | 3.0                   | 37.5         | 34                            | -                |
|             | "         | "           | "                    | 5.5                   | 32.5         | 49                            | -                |
|             | "         | "           | "                    | 7.8                   | 33.5         | 107                           | -                |

| STATION NO. | TIME      | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|-----------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-62        | MHW       | Summer 1970 | 9.1                  | 0.6                   | 34.5         | 40                            | -                |
|             | "         | "           | "                    | 3.0                   | 34.5         | 52                            | -                |
|             | "         | "           | "                    | 5.5                   | 35.0         | 42                            | -                |
|             | "         | "           | "                    | 7.9                   | 35.0         | 37                            | -                |
|             | Mid-Ebb   | "           | 7.9                  | 0.6                   | 30.5         | 17                            | -                |
|             | "         | "           | "                    | 3.0                   | 30.5         | 31                            | -                |
|             | "         | "           | "                    | 5.5                   | 31.5         | 97                            | -                |
| 0-63        | MLW       | "           | 1.8                  | 0.6                   | 29.5         | 18                            | -                |
|             | Mid-Flood | "           | 2.4                  | 0.6                   | 33.0         | 19                            | -                |
|             | MHW       | "           | 3.0                  | 0.6                   | 35.5         | 25                            | -                |
|             | Mid-Ebb   | "           | 2.4                  | 0.6                   | 32.5         | 13                            | -                |
| 0-64        | MLW       | "           | 3.0                  | 0.6                   | 30.0         | 15                            | -                |
|             | Mid-Flood | "           | 3.5                  | 0.6                   | 33.0         | 22                            | -                |
|             | "         | "           | "                    | 3.0                   | 34.0         | 35                            | -                |
|             | MHW       | "           | 5.5                  | 0.6                   | 35.5         | 16                            | -                |
|             | "         | "           | "                    | 3.0                   | 35.5         | 27                            | -                |
|             | Mid-Ebb   | "           | 3.5                  | 0.6                   | 32.5         | 9                             | -                |
|             | "         | "           | 3.5                  | 3.0                   | 32.5         | 16                            | -                |
| 0-65        | MLW       | "           | 6.7                  | 0.6                   | 29.0         | 11                            | -                |
|             | "         | "           | "                    | 3.0                   | 29.5         | 19                            | -                |
|             | "         | "           | 6.7                  | 5.5                   | 31.5         | 45                            | -                |
|             | Mid-Flood | "           | 7.3                  | 0.6                   | 32.5         | 14                            | -                |

| STATION NO. | TIME      | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-------------|-----------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-65        | Mid-Flood | Summer 1970 | 7.3                  | 3.0                   | 34.5         | 18                            | -                |
|             | "         | "           | "                    | 5.5                   | 35.0         | 43                            | -                |
|             | MHW       | "           | 8.5                  | 0.6                   | 35.5         | 12                            | -                |
|             | "         | "           | "                    | 3.0                   | 35.5         | 15                            | -                |
|             | "         | "           | "                    | 5.5                   | 36.0         | 20                            | -                |
|             | "         | "           | "                    | 7.9                   | 36.0         | 26                            | -                |
|             | Mid-Ebb   | "           | 7.3                  | 0.6                   | 32.0         | 70                            | -                |
|             | "         | "           | "                    | 3.0                   | 32.5         | 14                            | -                |
|             | "         | "           | "                    | 5.5                   | 33.0         | 17                            | -                |
| 0-66        | MLW       | "           | 8.8                  | 0.6                   | 28.5         | 7                             | -                |
|             | "         | "           | "                    | 3.0                   | 30.5         | 14                            | -                |
|             | "         | "           | "                    | 5.5                   | 31.5         | 42                            | -                |
|             | "         | "           | "                    | 7.9                   | 33.0         | 131                           | -                |
|             | Mid-Flood | "           | 9.6                  | 0.6                   | 33.0         | 16                            | -                |
|             | "         | "           | "                    | 3.0                   | 33.5         | 22                            | -                |
|             | "         | "           | "                    | 5.5                   | 35.0         | 38                            | -                |
|             | "         | "           | "                    | 7.9                   | 35.5         | 69                            | -                |
|             | MHW       | "           | 10.7                 | 0.6                   | 36.0         | 4                             | -                |
|             | "         | "           | "                    | 3.0                   | 36.0         | 5                             | -                |
|             | "         | "           | "                    | 5.5                   | 36.0         | 8                             | -                |
|             | "         | "           | "                    | 7.9                   | 36.0         | 11                            | -                |
|             | "         | "           | "                    | 10.4                  | 36.0         | 17                            | -                |
|             | Mid-Ebb   | "           | 9.6                  | 0.6                   | 30.5         | 15                            | -                |
|             | "         | "           | "                    | 3.0                   | 31.0         | 13                            | -                |

| STATION NO.     | TIME      | DATE        | WATER DEPTH (meters) | SAMPLE DEPTH (meters) | SALINITY (‰) | TOTAL SUSPENDED MATTER (mg/l) | PERCENT ORGANICS |
|-----------------|-----------|-------------|----------------------|-----------------------|--------------|-------------------------------|------------------|
| 0-66            | Mid-Ebb   | Summer 1970 | 9.6                  | 5.5                   | 31.5         | 19                            | -                |
|                 | "         | "           | "                    | 7.9                   | 32.5         | 47                            | -                |
| 0-67            | MLW       | "           | 6.1                  | 0.6                   | 30.0         | 13                            | -                |
|                 | "         | "           | "                    | 3.0                   | 30.5         | 17                            | -                |
|                 | "         | "           | "                    | 5.5                   | 31.0         | 19                            | -                |
|                 | Mid-Flood | "           | 6.9                  | 0.6                   | 33.5         | 84                            | -                |
|                 | "         | "           | "                    | 3.0                   | 33.5         | 195                           | -                |
|                 | "         | "           | "                    | 5.5                   | 34.0         | 245                           | -                |
|                 | MHW       | "           | 7.7                  | 0.6                   | 35.5         | 7                             | -                |
|                 | "         | "           | "                    | 3.0                   | 35.5         | 5                             | -                |
|                 | "         | "           | "                    | 5.5                   | 36.0         | 8                             | -                |
|                 | Mid-Ebb   | "           | 6.9                  | 0.6                   | 30.0         | 19                            | -                |
|                 | "         | "           | "                    | 3.0                   | 31.5         | 23                            | -                |
|                 | "         | "           | "                    | 5.5                   | 32.5         | 47                            | -                |
| <u>C SERIES</u> |           |             |                      |                       |              |                               |                  |
| C-1             | 1330      | 2/26/75     | 11.9                 | 0.3                   | NOT TAKEN    | 66.0                          | 19.3             |
|                 |           | "           |                      | 10.9                  |              | 38.7                          | 21.2             |
| C-2             | 1322      | 2/26/75     | 11.7                 | 0.3                   |              | 18.0                          | 31.0             |
|                 |           |             |                      | 10.7                  |              | 32.3                          | 23.4             |
| C-3             | 1315      | 2/26/75     | 4.3                  | 0.3                   |              | 23.0                          | 13.0             |
|                 |           |             | "                    | 3.3                   |              | 23.8                          | 11.3             |
| C-4             | 1303      | 2/26/75     | 5.8                  | 0.3                   |              | 17.4                          | 10.3             |
|                 |           |             | "                    | 4.8                   |              | 26.0                          | 14.4             |

| STATION NO. | TIME | DATE    | WATER DEPTH<br>(meters) | SAMPLE DEPTH<br>(meters) | SALINITY<br>(‰)     | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |      |
|-------------|------|---------|-------------------------|--------------------------|---------------------|----------------------------------|---------------------|------|
| C-5         | 1250 | 2/26/75 | 6.1                     | 0.3                      | -----NOT TAKEN----- | 3.8                              | 42.1                |      |
|             |      |         | "                       | 5.7                      |                     | 22.4                             | 13.4                |      |
| C-6         | 1242 | 2/26/75 | 6.7                     | 0.3                      |                     | 2.5                              | 32.0                |      |
|             |      |         | "                       | 5.7                      |                     | 2.1                              | 23.8                |      |
| C-7         | 1228 | 2/26/75 | 6.1                     | 0.3                      |                     | 3.6                              | 5.6                 |      |
|             |      |         | "                       | 5.1                      |                     | 4.6                              | 21.7                |      |
| C-8         | 1220 | 2/26/75 | 10.1                    | 0.3                      |                     | 4.2                              | 9.5                 |      |
|             |      |         | "                       | 9.1                      |                     | 9.3                              | 38.7                |      |
| C-9         | 1815 | 8/26/75 | 3.7                     | 0.3                      |                     | 24.0                             | 11.2                | 0.0  |
|             |      |         | "                       | 2.7                      |                     | 25.0                             | 81.2                | 22.2 |
| C-10        | 1820 | 8/26/75 | 13.3                    | 0.3                      | 25.0                | 4.5                              | 5.6                 |      |
|             |      |         | "                       | 12.3                     | 26.0                | 23.1                             | 2.5                 |      |
| C-11        | 1825 | 8/26/75 | 16.5                    | 0.3                      | 25.0                | 6.5                              | 11.5                |      |
|             |      |         | "                       | 15.5                     | 26.0                | 18.0                             | 7.9                 |      |
| C-12        | 1830 | 8/26/75 | 10.1                    | 0.3                      | 26.0                | 8.5                              | 5.9                 |      |
|             |      |         | "                       | 9.1                      | 26.0                | 16.0                             | 0.0                 |      |
| C-13        | 1835 | 8/26/75 | 7.8                     | 0.3                      | 26.0                | 6.5                              | 42.3                |      |
|             |      |         | "                       | 6.8                      | 27.0                | 11.0                             | 15.9                |      |
| C-14        | 1840 | 8/26/75 | 7.3                     | 0.3                      | 26.0                | 5.0                              | 15.0                |      |
|             |      |         | "                       | 7.3                      | 27.0                | 7.1                              | 3.1                 |      |
| C-15        | 1845 | 8/26/75 | 2.4                     | 0.3                      | 26.5                | 5.3                              | 33.4                |      |
|             |      |         | "                       | 1.4                      | 27.5                | 15.1                             | 26.5                |      |
| C-15a       | 1850 | 8/26/75 | 2.1                     | 0.3                      | 28.0                | 4.0                              | 16.8                |      |
|             |      |         | "                       | 1.1                      | 28.0                | 6.0                              | 6.7                 |      |
| C-16        | 1855 | 8/26/75 | 3.7                     | 0.3                      | 28.0                | 7.8                              | 32.3                |      |
|             |      |         | "                       | 2.7                      | 29.5                | 7.3                              | 1.7                 |      |

| STATION NO. | TIME | DATE    | WATER DEPTH<br>(meters) | SAMPLE DEPTH<br>(meters) | SALINITY<br>(‰) | TOTAL SUSPENDED<br>MATTER (mg/l) | PERCENT<br>ORGANICS |
|-------------|------|---------|-------------------------|--------------------------|-----------------|----------------------------------|---------------------|
| C-17        | 1900 | 8/26/75 | 5.2                     | 0.3                      | 28.5            | 3.0                              | 0.0                 |
|             |      |         | "                       | 4.2                      | 28.5            | 2.8                              | -                   |
| C-18        | 1905 | 8/26/75 | 4.6                     | 0.3                      | 29.0            | 2.2                              | 0.0                 |
|             |      |         | "                       | 3.6                      | 29.5            | 2.2                              | 0.0                 |
| C-19        | 1910 | 8/26/75 | 4.9                     | 0.3                      | 29.5            | 5.6                              | 28.6                |
|             |      |         | "                       | 3.9                      | 30.0            | 2.9                              | 0.0                 |
| C-20        | 1915 | 8/26/75 | 6.4                     | 0.3                      | 29.5            | 0.6                              | 0.0                 |
|             |      |         | "                       | 5.4                      | 30.5            | 2.0                              | 0.0                 |
| C-21        | 1920 | 8/26/75 | 7.9                     | 0.3                      | 29.5            | 3.5                              | 28.6                |
|             |      |         | "                       | 6.9                      | 31.0            | 5.3                              | 24.5                |
| C-22        | 1925 | 8/26/75 | 10.7                    | 0.3                      | 30.0            | 2.5                              | 30.0                |
|             |      |         | "                       | 9.7                      | 31.5            | 0.6                              | 0.0                 |
| C-23        | 1930 | 8/26/75 | 13.7                    | 0.3                      | 30.5            | 4.1                              | -                   |
|             |      |         | "                       | 12.7                     | 32.0            | 6.9                              | 47.8                |
| C-24        | 1948 | 8/26/75 | 18.9                    | 0.3                      | 26.5            | 2.9                              | 44.8                |
|             |      |         | "                       | 17.9                     | 32.0            | 4.6                              | 37.0                |
| C-25        | 2015 | 8/26/75 | 18.3                    | 0.3                      | 30.5            | 1.8                              | 33.3                |
|             |      |         | "                       | 17.3                     | 32.5            | 5.3                              | 47.2                |
| C-26        | 2115 | 8/26/75 | 11.7                    | 0.3                      | 32.0            | 2.2                              | 45.5                |
|             |      |         | "                       | 16.7                     | 32.5            | 3.3                              | 60.6                |
| C-27        | 2140 | 8/26/75 | 20.7                    | 0.3                      | 27.0            | 3.1                              | 29.0                |
|             |      |         | "                       | 19.7                     | 32.0            | 4.9                              | 18.4                |
| C-28        | 2210 | 8/26/75 | 22.6                    | 0.3                      | 31.5            | 2.9                              | -                   |
|             |      |         | "                       | 21.6                     | 28.5            | 1.2                              | 0.0                 |
| C-29        | 2240 | 8/26/75 | 25.6                    | 0.3                      | 33.0            | 3.6                              | 44.4                |
|             |      |         | "                       | 24.6                     | 31.0            | 1.4                              | -                   |

